

**REMARKS**

The Examiner is thanked for the thorough examination of the present application. The Office Action mailed May 17, 2007 rejected claims 1-21. This is a full and timely response to that outstanding Office Action. Upon entry of the amendments in this response, claims 1-21 are pending. More specifically, claims 1, 8, 13, and 18 are amended. These amendments are specifically described hereinafter.

**I. Present Status of Patent Application**

Claims 1, 8, 13, 18, and 21 are objected to because of an alleged grammatical informality. Claims 1, 2, 4-7, 13, 16, and 17 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by *Mangold, et al.* ("IEEE 802.11e Wireless LAN for Quality Service"). Claims 3, 8-12, 14, 15, and 18-21 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Mangold, et al.* ("IEEE 802.11e Wireless LAN for Quality Service") and *Soomro, et al.* (U.S. Publication No. 2004/0042435). These rejections are respectfully traversed.

**II. Claim Objections**

The Office Action objects to claims 1, 8, 13, 18, and 21 as allegedly containing grammatical informalities. In claims 1, 8, 13, and 18, the semicolon before "wherein" has been replaced with a comma. No error appears to be present in claim 21.

Therefore, Applicant respectfully submits that the objections to claims 1, 8, 13, 18, and 21 should be withdrawn.

### III. Rejections Under 35 U.S.C. §102(b)

#### A. Claims 1, 2, and 4-7

The Office Action rejects claims 1, 2, and 4-7 under 35 U.S.C. §102(b) as allegedly being anticipated by *Mangold, et al.* ("IEEE 802.11e Wireless LAN for Quality Service"). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

#### **Independent claim 1** recites:

1. A method comprising:  
using a shared resource; and  
refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource, **wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource.**

(Emphasis added).

Applicant respectfully submits that claim 1 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above. For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features of the claim at issue. See, e.g., *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 U.S.P.Q.2d 1129 (Fed. Cir. 1988).

Applicant respectfully submits that independent claim 1 is allowable for at least the reason that *Mangold* does not disclose, teach, or suggest at least **wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource.** Even if, assuming for the sake of argument, *Mangold* discloses that 802.11e uses a persistence

factor to increase the contention window for each Traffic Category, *Mangold* fails to disclose that a backoff interval is based on at least one previous backoff interval. *Mangold* does not disclose any detail about the “persistence factor,” and *Mangold* certainly does not disclose that the persistence factor is based on a previous backoff interval. Therefore, *Mangold* does not anticipate independent claim 1, and the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 1 is allowable over the cited references of record, dependent claims 2 and 4-7 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that dependent claims 2 and 4-7 contain all the features of independent claim 1. See *Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002); *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, since dependent claims 2 and 4-7 are patentable over *Mangold*, the rejection to claims 2 and 4-7 should be withdrawn and the claims allowed.

B. Claims 13, 16, and 17

The Office Action rejects claims 13, 16, and 17 under 35 U.S.C. §102(b) as allegedly being anticipated by *Mangold, et al.* (“IEEE 802.11e Wireless LAN for Quality Service”). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

**Independent claim 13** recites:

13. An apparatus comprising:  
a transmitter for using a shared resource; and  
a processor for refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource,

***wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource.***

(Emphasis added).

Applicant respectfully submits that claim 13 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above. For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features of the claim at issue.

Applicant respectfully submits that independent claim 13 is allowable for at least the reason that *Mangold* does not disclose, teach, or suggest at least **wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource**. Even if, assuming for the sake of argument, *Mangold* discloses that 802.11e uses a persistence factor to increase the contention window for each Traffic Category, *Mangold* fails to disclose that a backoff interval is based on at least one previous backoff interval. *Mangold* does not disclose any detail about the “persistence factor,” and *Mangold* certainly does not disclose that the persistence factor is based on a previous backoff interval. Therefore, *Mangold* does not anticipate independent claim 13, and the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 13 is allowable over the cited references of record, dependent claims 16 and 17 (which depend from independent

claim 13) are allowable as a matter of law for at least the reason that dependent claims 16 and 17 contain all the features of independent claim 13. Therefore, since dependent claims 16 and 17 are patentable over *Mangold*, the rejection to claims 16 and 17 should be withdrawn and the claims allowed.

#### IV. Rejections Under 35 U.S.C. §103(a)

##### A. Claim 3

The Office Action rejects claim 3 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Mangold, et al.* ("IEEE 802.11e Wireless LAN for Quality Service") and *Soomro, et al.* (U.S. Publication No. 2004/0042435). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

For at least the reason that independent claim 1 is allowable over the cited references of record, dependent claim 3 (which depends from independent claim 1) is allowable as a matter of law for at least the reason that dependent claim 3 contains all the features of independent claim 1. Therefore, the rejection to claim 3 should be withdrawn and the claim allowed.

Additionally, with regard to the rejection of claim 3, *Soomro* does not make up for the deficiencies of *Mangold* noted above. Therefore, claim 3 is considered patentable over any combination of these documents for at least the reason that claim 3 incorporates allowable features of claim 1 as set forth above.

##### B. Claims 8-12

The Office Action rejects claims 8-12 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Mangold, et al.* ("IEEE 802.11e Wireless LAN for Quality Service") and *Soomro, et al.* (U.S. Publication No. 2004/0042435). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

**Independent claim 8** recites:

8. A method comprising:  
using a shared resource;  
refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource; and  
powering down a receiver for at least a portion of said backoff interval,  
**wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource.**

(Emphasis added).

Applicant respectfully submits that claim 8 patentably defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above. For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features of the claim at issue.

Applicant respectfully submits that independent claim 8 is allowable for at least the reason that the combination of *Mangold* and *Soomro* does not disclose, teach, or suggest at least **wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource**. Even if, assuming for the sake of argument, *Mangold* discloses that 802.11e uses a persistence factor to increase the contention window for each Traffic Category, *Mangold* fails to disclose that a backoff interval is based on at least one previous

backoff interval. *Mangold* does not disclose any detail about the “persistence factor,” and *Mangold* certainly does not disclose that the persistence factor is based on a previous backoff interval. *Soomro* fails to cure this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 8, the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 8 is allowable over the cited references of record, dependent claims 9-12 (which depend from independent claim 8) are allowable as a matter of law for at least the reason that dependent claims 9-12 contain all the features of independent claim 8. Therefore, the rejection to claims 9-12 should be withdrawn and the claims allowed.

C. Claims 14 and 15

The Office Action rejects claims 14 and 15 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Mangold, et al.* (“IEEE 802.11e Wireless LAN for Quality Service”) and *Soomro, et al.* (U.S. Publication No. 2004/0042435). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

For at least the reason that independent claim 13 is allowable over the cited references of record, dependent claims 14 and 15 (which depend from independent claim 13) are allowable as a matter of law for at least the reason that dependent claims 14 and 15 contain all the features of independent claim 13. Therefore, the rejection to claims 14 and 15 should be withdrawn and the claims allowed.

Additionally, with regard to the rejection of claims 14 and 15, *Soomro* does not make up for the deficiencies of *Mangold* noted above. Therefore, claims 14 and 15 are considered patentable over any combination of these documents for at least the reason that claims 14 and 15 incorporate allowable features of claim 13 as set forth above.

D. Claims 18-21

The Office Action rejects claims 18-21 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Mangold, et al.* ("IEEE 802.11e Wireless LAN for Quality Service") and *Soomro, et al.* (U.S. Publication No. 2004/0042435). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

**Independent claim 18** recites:

18. An apparatus comprising:  
a host computer for directing a station to use a shared resource, said station for:
- (1) using said shared resource;
  - (2) refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource;  
and
  - (3) powering down a receiver for at least a portion of said backoff interval, ***wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource.***

(Emphasis added).

Applicant respectfully submits that claim 18 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above. For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features of the claim at issue.



Applicant respectfully submits that independent claim 18 is allowable for at least the reason that the combination of *Mangold* and *Soomro* does not disclose, teach, or suggest at least **wherein said backoff interval is based on at least one previous backoff interval that is associated with at least one previous use of said shared resource**. Even if, assuming for the sake of argument, *Mangold* discloses that 802.11e uses a persistence factor to increase the contention window for each Traffic Category, *Mangold* fails to disclose that a backoff interval is based on at least one previous backoff interval. *Mangold* does not disclose any detail about the “persistence factor,” and *Mangold* certainly does not disclose that the persistence factor is based on a previous backoff interval. *Soomro* fails to cure this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 18, the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 18 is allowable over the cited references of record, dependent claims 19-21 (which depend from independent claim 18) are allowable as a matter of law for at least the reason that dependent claims 19-21 contain all the features of independent claim 18. Therefore, the rejection to claims 19-21 should be withdrawn and the claims allowed.

**V. Miscellaneous Issues**

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

**CONCLUSION**

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-21 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

It is believed that no extensions of time or fees for net addition of claims are required, beyond those which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to deposit account No. 50-0835.

Respectfully submitted,

/BAB/

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